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[11]: 1 import pandas as pd
2 df=pd.read_csv('/home/sahyadri/Desktop/Sports4.csv')
3 df=df.drop(['slno'],axis=1)
4 concepts=df.values[:, :-1]
5 target=df.values[:, -1]
6 df.head()
7 def learn(concepts,target):
8     specific_h=concepts[0].copy()
9     general_h=[["?" for i in range(len(specific_h))] for i in range(len(specific_h))]
10    for i,h in enumerate(concepts):
11        if target[i]=="yes":
12            for x in range(len(specific_h)):
13                if h[x]!=specific_h[x]:
14                    specific_h[x]='?'
15                    general_h[x][x]='?'
16        if target[i]=="no":
17            for x in range(len(specific_h)):
18                if h[x]!=specific_h[x]:
19                    general_h[x][x]=specific_h[x]
20            else:
21                general_h[x][x]='?'
22    indices=[i for i,val in enumerate(general_h) if val==['?', '?', '?', '?', '?', '?']]
23    for i in indices:
24        general_h.remove(['?', '?', '?', '?', '?', '?'])
25    return specific_h,general_h
26 s_final,g_final=learn(concepts,target)
27 print(f"Final S:{s_final}")
28 print(f"Final G:{g_final}")

```

Final S:['sunny' 'warm' '?' 'strong' '?' '?']

Final G:[['sunny', '?', '?', '?', '?', '?'], ['?', 'warm', '?', '?', '?', '?']]


```

In [11]: 1 import pandas as pd
2 df=pd.read_csv('/home/sahyadri/Desktop/Sports4.csv')
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22    indices=[i for i,val in enumerate(general_h) if val==['?','?','?','?','?','?']]
23    for i in indices:
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25    return specific_h,general_h
26 s_final,g_final=learn(concepts,target)
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Final S:['sunny' 'warm' '?' 'strong' '?' '?']

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